Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. **(Amended)** A planarization method comprising:

positioning a Group VIII metal-containing surface of a substrate to interface with a polishing surface, wherein the Group VIII metal is selected from the group consisting of rhodium, iridium, ruthenium, osmium, palladium, platinum, and combinations thereof;

supplying a planarization composition in proximity to the interface;

adding an oxidizing agent to the planarization composition in the form of a gas;

and

planarizing the Group VIII metal-containing surface;

wherein the [planarization composition comprises an] oxidizing gas [having] has a standard reduction potential of at least about 1.4 versus a standard hydrogen electrode at 25°C.

2. **(Original)** The method of claim 1 wherein the Group VIII metal-containing surface of the substrate comprises a Group VIII metal in elemental form or an alloy thereof.

3. **(Original)** The method of claim 2 wherein the Group VIII metal-containing surface comprises elemental platinum, rhodium, iridium, ruthenium, or a combination thereof.

4. **(Original)** The method of claim 3 wherein the Group VIII metal-containing surface comprises elemental platinum.

5. **(Original)** The method of claim 1 wherein the Group VIII metal is present in an amount of about 10 atomic percent or more.

6. **(Original)** The method of claim 1 wherein the substrate is a semiconductor substrate or substrate assembly.

7. **(Original)** The method of claim 1 wherein the polishing surface comprises a polishing pad and the planarization composition comprises a plurality of abrasive particles.

8. **(Original)** The method of claim 1 wherein the planarization composition comprises a plurality of abrasive particles having a hardness of no greater than about 9 Mohs.

9. **(Original)** The method of claim 8 wherein the plurality of abrasive particles comprise CeO_2, Al_2O_3, SiO_2, and mixtures thereof.

10. **(Original)** The method of claim 1 which is carried out in one step.

11. **(Original)** The method of claim 1 wherein the oxidizing gas is selected from the group consisting of oxygen, ozone, air, chlorine, nitrous oxide, nitric oxide, sulfur trioxide, an interhalogen, and combinations thereof.

12. **(Original)** The method of claim 11 wherein the oxidizing gas is selected from the group consisting of oxygen, air, and combinations thereof.

13. **(Original)** The method of claim 12 wherein the oxidizing gas is oxygen.

14. **(Original)** The method of claim 1 wherein planarizing is carried out using a fixed abrasive article.

15. **(Amended)** A planarization method comprising:

positioning a Group VIII metal-containing surface of a substrate to interface with a polishing surface, wherein the Group VIII metal is selected from the group consisting of rhodium, iridium, ruthenium, osmium, palladium, platinum, and combinations thereof;

supplying a planarization composition in proximity to the interface;

and

planarizing the Group VIII metal-containing surface;

wherein the planarization composition comprises an oxidizing gas selected from the group consisting of oxygen, air, chlorine, nitrous oxide, nitric oxide, sulfur trioxide, an interhalogen, and combinations thereof[[.]] ;

wherein the polishing surface comprises a fixed abrasive article or a polishing pad; and

wherein when the polishing surface comprises a polishing pad the planarization composition comprises a plurality of abrasive particles having a hardness of no greater than 9 Mohs.

16. **(Amended)** A planarization method comprising:

positioning a Group VIII metal-containing surface of a substrate to interface with a polishing surface, wherein the Group VIII metal is selected from the group consisting of rhodium, iridium, ruthenium, osmium, palladium, platinum, and combinations thereof;

supplying a planarization composition in proximity to the interface;

adding an oxidizing agent to the planarization composition in the form of a gas;

and

planarizing the Group VIII metal-containing surface;

wherein the [planarization composition comprises an] oxidizing gas [having] has a standard reduction potential of at least about 1.4 versus a standard hydrogen electrode at 25°C, wherein the oxidizing gas is [present] added in the composition in an amount of no greater than about 10% by weight.

17. **(Amended)** A planarization method comprising:

providing a semiconductor substrate or substrate assembly including at least one region of a platinum-containing surface;

providing a polishing surface;

providing a planarization composition at an interface between the at least one region of platinum-containing surface and the polishing surface; and

adding an oxidizing agent to the planarization composition in the form of a gas;

planarizing the at least one region of platinum-containing surface;

wherein the [planarization composition comprises an] oxidizing gas [having] has a standard reduction potential of at least about 1.4 versus a standard hydrogen electrode at 25°C.

18. **(Original)** The method of claim 17 wherein the platinum is present in an amount of about 10 atomic percent or more.

19. **(Original)** The method of claim 17 wherein the platinum-containing surface comprises elemental platinum.

20. **(Original)** The method of claim 17 wherein the planarization composition comprises a plurality of abrasive particles selected from the group consisting of CeO_2, Al_2O_3, SiO_2, and mixtures thereof.

21. **(Original)** The method of claim 17 wherein the platinum-containing surface comprises a platinum alloy.

22. **(Original)** The method of claim 17 wherein the semiconductor substrate or substrate assembly is a silicon wafer.

23. **(Original)** The method of claim 17 wherein the oxidizing gas is selected from the group consisting of oxygen, nitrous oxide, air, or combinations thereof.

24. **(Original)** The method of claim 23 wherein the oxidizing gas is selected from the group consisting of oxygen, air, or combinations thereof.

25. **(Original)** The method of claim 24 wherein the oxidizing gas is selected from the group consisting of oxygen.

26. **(Amended)** A planarization method for use in forming a capacitor or barrier layer:

providing a wafer having a patterned dielectric layer formed thereon and a Group VIII metal-containing layer formed over the patterned dielectric layer, wherein the Group VIII metal is selected from the group consisting of rhodium, iridium, ruthenium, osmium, palladium, platinum, and combinations thereof;

positioning a first portion of a polishing surface for contact with the Group VIII metal-containing layer;

adding an oxidizing agent to the planarization composition in the form of a gas;

providing a planarization composition in proximity to the contact between the polishing surface and the Group VIII metal-containing layer;

and

planarizing the Group VIII metal-containing layer;

wherein the [planarization composition comprises an] oxidizing gas [having] has a standard reduction potential of at least about 1.4 versus a standard hydrogen electrode at 25°C.

27. **(New)** The method of claim 16 wherein the polishing surface comprises a fixed abrasive article or a polishing pad; and

wherein when the polishing surface comprises a polishing pad the planarization composition comprises a plurality of abrasive particles having a hardness of no greater than 9 Mohs.

28. **(New)** The method of claim 17 wherein the polishing surface comprises a fixed abrasive article or a polishing pad; and

wherein when the polishing surface comprises a polishing pad the planarization composition comprises a plurality of abrasive particles having a hardness of no greater than 9 Mohs.

29. **(New)** The method of claim 26 wherein the polishing surface comprises a fixed abrasive article or a polishing pad; and

wherein when the polishing surface comprises a polishing pad the planarization composition comprises a plurality of abrasive particles having a hardness of no greater than 9 Mohs.